

# REPORT DOCUMENTATION PAGE

Form Approved  
OMB NO. 0704-0188

Public Reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comment regarding this burden estimates or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave Blank)		2. REPORT DATE 2 Feb 02		3. REPORT TYPE AND DATES COVERED Final Report 92-01	
4. TITLE AND SUBTITLE ONR Future Engineering Faculty Fellowship Program				5. FUNDING NUMBERS  Grant	
6. AUTHOR(S) Dr. John Kelly, Project Director					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) North Carolina A&T State University 1601 East Market Street Greensboro, NC 27411				8. PERFORMING ORGANIZATION REPORT NUMBER N00014-92-J-1252	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)  U. S. Army Research Office P.O. Box 12211 Research Triangle Park, NC 27709-2211				10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other documentation.					
12 a. DISTRIBUTION / AVAILABILITY STATEMENT  Approved for public release; distribution unlimited.				12 b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words)  The Office of Naval Research (ONR) Historically Black Colleges and Universities (HBCU) Future Engineering Faculty Fellowship Program completed ten (10) years of service as of September 31, 2001. The program continues to represent a commitment by the Office of Naval Research to the Deans of Historically Black Engineering Colleges (HBEC) by providing monetary assistance to students in the pursuit of the Ph.D. degree in engineering who have certified their commitment to teach at a sponsoring HBEC. Most importantly, the program assists with the enhancement of the number of faculty at these institutions who hold the Ph.D. in Engineering, thus escalating the overall quality and excellence at these institutions. Over the past ten years, the ONR/HBCU Future Engineering Faculty Fellowship Program has served thirty-two (32) students at various accredited engineering colleges across sixteen (16) states.					
14. SUBJECT TERMS				15. NUMBER OF PAGES 11	
				16. PRICE CODE	
17. SECURITY CLASSIFICATION OR REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION ON THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UL		

NSN 7540-01-280-5500

Standard Form 298 (Rev.2-89)  
Prescribed by ANSI Std. Z39-18  
298-102

20020215 141

# HBCU Future Engineering Faculty Fellowship Program

Office of  
Naval Research



800 N. Quincey St., Arlington, VA 22217-5660

## FINAL REPORT

To:

Mrs. Laura Petonito  
Program Manager, Educational Programs  
Corporate Programs Division  
Office of Naval Research  
801 N. Randolph Street, Suite 108  
Arlington, Virginia 22203

From:

Dr. John Kelly, Program Director  
North Carolina A&T State University  
Department of Electrical Engineering  
Greensboro, NC 27411

February 12, 2002  
**N000014-92-J-1252**

## **1.0 Introduction**

The Office of Naval Research (ONR) Historically Black Colleges and Universities (HBCU) Future Engineering Faculty Fellowship Program completed ten (10) years of service as of September 31, 2001. The program continues to represent a commitment by the Office of Naval Research to the Deans of Historically Black Engineering Colleges (HBEC) by providing monetary assistance to students in the pursuit of the Ph.D. degree in engineering who have certified their commitment to teach at a sponsoring HBEC. Most importantly, the program assists with the enhancement of the number of faculty at these institutions who hold the Ph.D. in Engineering, thus escalating the overall quality and excellence at these institutions. Over the past ten years, the ONR/HBCU Future Engineering Faculty Fellowship Program has served thirty-two (32) students at various accredited engineering colleges across sixteen (16) states.

## **2.0 Program Management**

Dr. John C. Kelly, Jr., Department Chairperson of Electrical Engineering, and Dr. Joseph Monroe, Dean of Engineering at North Carolina A&T State University will administer the ONR/HBEC Ph.D. Fellowship Program. The Fellowship Program will continue to be administered in conjunction with the Historically Black Engineering Colleges Committee and the American Society for Engineering Education (ASEE).

The Historically Black Engineering Colleges Committee will enhance its advertisement materials that announce the Fellowship Program and will disseminate them through the Deans of Engineering throughout the country and the ASEE. Applications will be received by the Program Director at North Carolina A&T State University and presented to the HBEC for review and selection of new awards. The Committee will review annually the progress of current fellowship recipients for continuation of funding for the second and third years, respectively.

## **2.1 Promotional Materials and Awareness**

### **Brochure:**

A revised ONR Future Faculty Fellowship program booklet has been completed. The booklet contains updated information such as funding, contact information and the addresses of the ONR web site and e-mail accounts. As new funding increases occur, the brochure will be revised and updated to reflect this information.

**Web Site:**

The ONR Website is in the process of being updated. The Program Manager will design a new look for the site and display some of the recipients of the fellowship and their research. The website is currently being used to promote and advertise the ONR Fellowship program to prospective doctoral candidates. The website includes information regarding funding guidelines, contact information and an application that can be downloaded for easy access. The website address is <http://onrfellowship.ncat.edu>

**E-mail:**

In addition to the newly constructed ONR Web Site, the ONR Future Faculty Fellowship program has its own e-mail account to provide feedback to questions or concerns regarding the program. The e-mail address is [onrfellowship@ncat.edu](mailto:onrfellowship@ncat.edu).

**University Visitations:**

Four Universities were visited this year to promote awareness of this Fellowship Program. They were: Howard University, Morgan State University, North Carolina State University and Georgia Tech University.

**3.0 Measurements and Evaluation Process**

The true measure of the success of the fellowship program will continue to be tied to the numbers of students who ultimately pursue and complete the Ph.D. degree in engineering and who return as faculty at the HBCUs. To date, 60% of the graduates have pursued careers at HBCU's.

**4.0 Selection Process:**

The Historically Black Engineering Colleges Committee (HBECC) makes at least three (3) new ONR Ph.D. Fellowship awards annually. This HBECC is a subcommittee of the American Society of Engineering Education (ASEE). Funding is available to support up to nine (9) awards per year. Dr. John Kelly, Program Director, chairs the selection committee. Typically, the selection committee includes four (4) persons chosen from the HBECC and from the broader engineering community (including industry, government, and academia). Dr. Kelly assumes the responsibility for finalizing the selection committee and Mrs. Anita Huff, Program Manager coordinates the review process.

Five applications were received for the 2000-2001 academic year. Evaluations were based on the following criteria: 1) academic achievement, 2) area of study, 3) personal statement, and 4) letters of recommendations. The following recipients were chosen:

## 2001-2002 New ONR Fellowship Recipients:

Name	Discipline	University
Rosalind Wynne	Electrical & Computer Engineering	Boston University
Michel Reece	Electrical Engineering	Morgan State University
Gregory Triplett	Electrical Engineering	Georgia Tech
Christopher Geiger	Industrial Engineering	Purdue University

### 5.0 Program Fiscal Accountability

North Carolina A&T State University has full capability for financial accounting, management, and administration of sponsored program awards. The Division of Business and Finance, through its Office of Contracts and Grants, has custody of all financial records including trust and fund accounts, and will have responsibility for budgeting functions related to accepted practices for excellent fiscal management of the grant.

The management and fiscal capability of all accounts are handled through a totally computerized and automated Financial Reporting System (FRS), which allows for independent accounting for each sponsored award

### 6.0 Level of Financial Support

The fellowship award includes a stipend, a travel allowance, and tuition (including books and fees) for each student during a three-year period renewable annually. The stipend component is in the amount of \$17,000, \$18,000 and \$19,000 for year 1, year 2 and year 3, respectively. The tuition component and travel allowances are \$8,000 per year and \$1,000 per year respectively.

Fellowship awards may be renewed if the following criteria are met:

1. student is progressing consistent with graduation date as indicated on the application
2. student must maintain at minimum a cumulative grade point average of 3.0 on a 4.0 scale or a 4.0 on a 5.0 scale.
3. student enrolls for full-time course or dissertation hours
4. student must provide an annual progress report from the academic advisor
5. after the first year, the student must commit (in writing) to becoming a faculty member at one of the Historically Black Engineering Colleges for compensation and benefits to be mutually agreed upon at graduation.

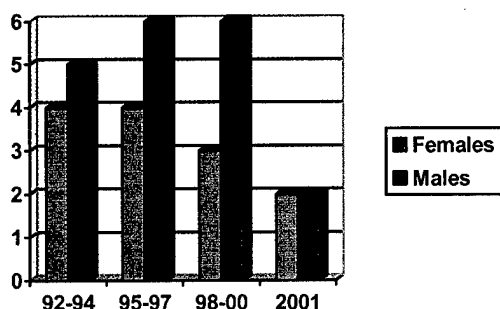
## 7.0 Summary of Program Accomplishments:

Since the program's inception in 1992, the project has been quite successful as indicated by the following statistics:

- ninety-three (93) applicants have applied for the ONR/HBEC Faculty Fellowship Program (includes 12 received for Spring 2001 applicants)
- thirty-two (32) of these students have been selected to receive the fellowship which includes the four (4) new 2001 fellows for this academic year.
- nine (9) are currently being funded during the 2001 academic year
- fifteen (15) students have completed the Ph.D.
- eight (8) of the fifteen (15) graduates are currently on the engineering faculty at an HBCUs and other engineering institutions.
- one (1) student has graduated and is job searching at HBCU's
- three (3) students are still enrolled in the doctoral program although funding has expired
- only one (1) student did not complete the Ph.D. in engineering

Additionally, it should be noted that twenty-seven (27) of the thirty-two (32) fellows funded through the project are either still enrolled or have graduated with the Ph.D. in engineering. This success is unmatched by any other fellowship program with similar objective. NOTE: This does not include four newly funded fellowship recipients.

## 7.1 Gender Statistics



To date, thirteen (13) females and nineteen (19) males have received the ONR fellowship. This includes the four newly funded fellowship recipients as of Spring, 2001.

Of the thirteen females, five (5) have completed the Ph.D. in engineering. Two (2) are faculty at engineering institutions; two (2) are working in industry and one (1) is job searching. Seven (7) females are still enrolled in the doctoral program. Only one (1) female did not complete the Ph.D. program.

Of the nineteen males, ten (10) has completed the Ph.D. in engineering. Six (6) are faculty at engineering institutions; four (4) are in industry.

## 7.2 Geographical Statistics:

Over the past ten years the ONR/HBEC Future Faculty Fellowship Award has impacted sixteen states and nineteen different universities as indicated below:

### University Locations



The table below indicates the number of fellows awarded in each state since 1992:

STATE	NO. OF FELLOWSHIPS AWARDED
Colorado	1
Florida	1
Georgia	4
Illinois	1
Indiana	1
Maryland	2
Massachusetts	2
Michigan	2
New Jersey	1
New York	2
North Carolina	5
Ohio	2
Tennessee	1
Texas	1
Virginia	3
Washington, D.C.	2
West Virginia	1
<b>TOTAL:</b>	<b>32</b>

Table below indicates number of students awarded from each University since 1992:

UNIVERSITY	NO. OF FELLOWSHIPS AWARDED
University of Colorado	1
University of Florida	1
Georgia Tech University	4
Northwestern University	1
Purdue University	1
Morgan State University	2
Massachusetts Institute of Technology	1
Boston University	1
Michigan State University	2
Rutgers University	1
State University of New York	1
Cornell University	1
North Carolina State University	4
North Carolina A&T State University	1
University of Toledo Ohio	1
University of Dayton Ohio	1
University of Tennessee at Knoxville	1
Texas A&M University	1
Virginia Polytechnical University	3
Howard University	2
West Virginia	1
<b>TOTAL:</b>	<b>32</b>



## 8.0 EXPENDITURES:

The following are ONR Fellowship award commitments for FY'2001 through September 31, 2001:

Albert Essiam	MIT		14,000
Stanley Rogers	University of Dayton		14,000
Carl Moore	Northwestern University		14,000
Tony Graham	Morgan State University		13,500
William Hamlet	West Virginia University		13,500
Thomas Erwin Gilmore	Howard University		13,500
Maranda McBride	North Carolina A&T State University		13,000
Paula Johnson	University of Florida		13,000
Felicia Nave	University of Toledo		13,000
Rosalind Wynne	Boston University	<i>New</i>	0
Michel Reece	Morgan State University	<i>New</i>	0
Gregory Triplett	Georgia Tech	<i>New</i>	0
*Christopher Geiger	Purdue University	<i>New</i>	0
	<b>Total:</b>		<b>121,500</b>

\*This fellow was awarded for one semester only.

A summary of the above ONR/HBCU Future Engineering Fellowship recipients is listed on Table 1.

### 8.1 SUMMARY OF EXPENDITURES: August 1, 2000 through September 31, 2001

#### 1. Fellowship Awards:

<i>Continuing Fellows:</i>	<i>Amt Awarded:</i>
a. Year 3 Awards	\$84,000
b. Year 2 Awards	81,000
 <i>New Fellows:</i>	
c. Year 1 Awards	<u>78,000</u>
Totals:	<b>\$243,000</b>

#### 2. Administrative Costs:

(13% of Total Fellowship)	\$32,704
---------------------------	----------

3. Enhanced Support	<u>10,000</u>
---------------------	---------------

<b>Totals:</b>	<b>\$285,704</b>
----------------	------------------

## 9.0 Updated List of Deans of the Historically Black Engineering Colleges:

Dr. Morris H. Morgan, III  
Dean of Engineering and Technology  
Hampton University  
Hampton, VA 23662

Dr. Joseph Monroe  
Dean, College of Engineering  
North Carolina A&T State University  
Greensboro, NC 27411

Dr. Eugene M. Deloatch  
Dean, School of Engineering  
Morgan State University  
Baltimore, MD 21239

Dr. Legand L. Burge, Jr.  
Interim Dean, School of Engineering  
Tuskegee University  
Tuskegee, AL 36088

Dr. Earnest J. Walker  
Dean, School of Engineering  
Southern University  
Baton Rouge, LA 70813

Dr. Milton R. Bryant  
Dean, College of Engineering  
Prairie View A&M University  
Prairie View, TX 77446

Dr. Decatur B. Rogers  
Dean, School of Engineering  
Tennessee State University  
Nashville, TN 37201

Dr. James H. Johnson  
Dean, School of Engineering  
Howard University  
Washington, DC 20059

Dr. Ching-Jen Chen  
Dean, College of Engineering  
Florida A&M University/Florida State University  
Tallahassee, FL 32316-2175

**Table 1: Summary of the ONR/HBCU Future Engineering Faculty Fellowship**

AWARD YEAR	NAME	MAJOR	UNIVERSITY	STATUS	Stipend	Tuition	Travel	Total	Student Status
<b>Funding Expired</b>	<b>1992 Fellows</b>								
<b>Funding Expired</b>	Janet Lynn Green	Chemical Engineering	Michigan State University	Graduated - July 1996	\$0	\$0	\$0	\$0	Chrysler
<b>Funding Expired</b>	Berdenia Pecolia Walker	Electrical Engineering	Georgia Tech	Graduated June 1997	\$0	\$0	\$0	\$0	Univ. of Minn.
<b>Funding Expired</b>	Garlen Dale Wesson	Chemical Engineering	Michigan State University	Graduated May 1996	\$0	\$0	\$0	\$0	FAMU/FSU
<b>Funding Expired</b>	<b>1993 Fellows</b>								
<b>Funding Expired</b>	Mabel Yvette Watson	Electrical & Computer Engineering	N.C. State University	Graduated May 1999	\$0	\$0	\$0	\$0	Industry
<b>Funding Expired</b>	<b>1994 Fellows</b>								
<b>Funding Expired</b>	Vernal G. Alford	Civil Engineering	N.C. State University	*ABD May 2000	\$0	\$0	\$0	\$0	NCA&TSU
<b>Funding Expired</b>	Dewayne Randolph Brown	Electrical Engineering	Virginia Tech	Graduated May 1997	\$0	\$0	\$0	\$0	NCA&TSU
<b>Funding Expired</b>	Derrek Butler Dunn	Electrical Engineering	Virginia Tech	Graduated Dec 1998	\$0	\$0	\$0	\$0	NCA&TSU
<b>Funding Expired</b>	Kelvin Kennard Kirby	Electrical Engineering	Texas A&M University	Graduated May 1998	\$0	\$0	\$0	\$0	Prairie-View A&M Univ
<b>Funding Expired</b>	Janise Yvette McNair	Electrical Engineering	Georgia Tech	Graduated Dec 2000	\$0	\$0	\$0	\$0	University of Florida
<b>Funding Expired</b>	<b>1995 Fellows</b>								
<b>Funding Expired</b>	Christon M. Archong	Geological Sciences	Cornell University	Graduated May 1999	\$0	\$0	\$0	\$0	Industry
<b>Funding Expired</b>	Martha L. Haigler	Computer Science	Virginia Tech	Did Not Complete	\$0	\$0	\$0	\$0	Did Not Complete
<b>Funding Expired</b>	Sean C. Garrick	Mechanical Engineering	State Univ. of New York	Graduated May 1998	\$0	\$0	\$0	\$0	Industry
<b>Funding Expired</b>	Charles C. Glass	Environmental Engineering	University of Colorado	Graduated May 1998	\$0	\$0	\$0	\$0	Industry
<b>Funding Expired</b>	<b>1996 Fellows</b>								
<b>Funding Expired</b>	Harvey Lee Ray	Electrical & Computer Engineering	Rutgers University	Graduated May 1999	\$0	\$0	\$0	\$0	Hewlett Packard
<b>Funding Expired</b>	Preston Frazier	Electrical Engineering	Howard University	Graduated May 1999	\$0	\$0	\$0	\$0	Howard Univ
<b>Funding Expired</b>	Frances Williams (1)	Electrical Engineering	Georgia Tech	Continuing	\$0	\$0	\$0	\$0	Enrolled

**Table 1 (continued) Summary of the ONR/HBCU Future Engineering Fellowship Recipients**

AWARD YEAR	NAME	MAJOR	UNIVERSITY	CURRENT STATUS	Stipend	Tuition	Travel	TOTAL	Student Status
<b>Funding Expired</b>	<b>1997 Fellows</b>								
	Judith-Marie Parks	Industrial Engineering	North Carolina State University	Continuing	\$0	\$0	\$0	\$0	Enrolled
<b>Funding Expired</b>	Kenneth N. Ellis	Computer Engineering	North Carolina State University	Continuing	\$0	\$0	\$0	\$0	Enrolled
<b>Funding Expired</b>	Thada Somphone	Engineering Science and Mechanics	University of Tennessee-Knoxville	Graduated May 2001	\$0	\$0	\$0	\$0	Job Searching at HBCU's
<b>3</b>	<b>1998 Fellows</b>								
	Albert Essiam	Civil & Environmental Engineering	Massachusetts Institute of Technology	Graduated Aug 2001	\$19,000	\$8,000	\$1,000	\$28,000	Atlanta Corp Enrolled
<b>3</b>	Stanley Rogers	Electrical Engineering	University of Dayton	Continuing	\$19,000	\$8,000	\$1,000	\$28,000	Enrolled
<b>3</b>	Carl Moore	Mechanical Engineering	Northwestern University	Continuing	\$19,000	\$8,000	\$1,000	\$28,000	<b>Enrolled</b>
<b>2</b>	<b>1999 Fellows</b>								
	Tony Graham	Civil Engineering	Morgan State University	Continuing	\$18,000	\$8,000	\$1,000	\$27,000	Enrolled
<b>2</b>	William Hamlet	Chemical Engineering	West Virginia University	*ABD May, 2001	\$18,000	\$8,000	\$1,000	\$27,000	Did Not Complete
<b>2</b>	Erwin Gilmore, III	Electrical Engineering	Howard University	Continuing *All But Dissertation	\$18,000	\$8,000	\$1,000	\$27,000	Enrolled
<b>1</b>	<b>2000 Fellows</b>								
	Paula Johnson	Environmental Engineering	University of Florida	New	\$17,000	\$8,000	\$1,000	\$26,000	Enrolled
<b>1</b>	Maranda McBride	Industrial Engineering	North Carolina A & T State University	New	\$17,000	\$8,000	\$1,000	\$26,000	Enrolled
<b>1</b>	Felicia Nave	Chemical Engineering	University of Toledo	New	\$17,000	\$8,000	\$1,000	\$26,000	Enrolled
<b>GRAND TOTALS:</b>					<b>\$162,000</b>	<b>\$72,000</b>	<b>\$9,000</b>	<b>\$243,000</b>	